

Title (en)

Composite electro-spark electrode and methods of its use

Title (de)

Zusammengesetzte Elektrofunktenelektrode und Verfahren zu deren Verwendung

Title (fr)

Électrode à étincelle électrique composite et ses procédés d'utilisation

Publication

EP 2835212 A2 20150211 (EN)

Application

EP 14179059 A 20140730

Priority

US 201313963067 A 20130809

Abstract (en)

Composite electro-spark electrodes 10, along with methods of their use in an electro-spark deposition process, are provided. The composite electro-spark electrode 10 can include an electrode tip 12 that is mechanically and electrically attached to a shank 14. The shank 14 comprises a resistive material, and the electrode tip 12 comprises a metal, with the metal of the electrode tip 12 being less electrically resistive than the resistive material of the shank 14. Additionally, the metal of the electrode tip 12 can be more thermally conductive than the resistive material of the shank 14.

IPC 8 full level

B23K 35/32 (2006.01); **B23K 35/02** (2006.01); **C23C 26/00** (2006.01)

CPC (source: EP US)

B23K 35/02 (2013.01 - EP US); **B23K 35/0255** (2013.01 - EP US); **B23K 35/32** (2013.01 - EP US); **C23C 4/08** (2013.01 - US); **B23K 35/40** (2013.01 - EP US)

Cited by

RU2623942C1; CN108699703A; CN110238470A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2835212 A2 20150211; **EP 2835212 A3 20150304**; US 2015041450 A1 20150212

DOCDB simple family (application)

EP 14179059 A 20140730; US 201313963067 A 20130809